

EVALUATION OF THE PRESCRIPTION PATTERNS OF STATINS THROUGH APPROPRIATE INDICATORS IN TWO ITALIAN LOCAL HEALTH UNITS IN 2004-2006

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BACKGROUND

Drug therapy should be appropriately prescribed and administered in order to efficaciously prevent cardiovascular events. Study aim was to describe the prescriptions of statins in terms of persistence and compliance with the purpose to identify appropriate pharmaco-epidemiological indicators close to clinical practice.

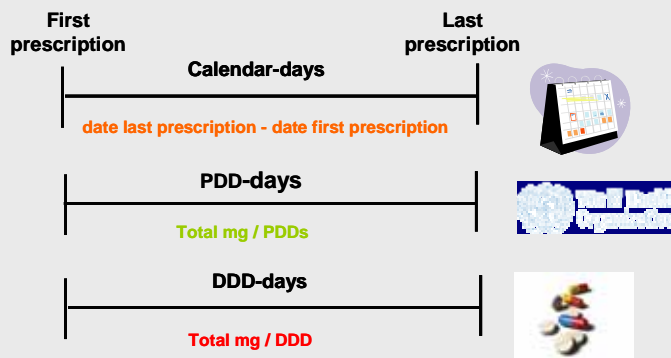
METHODS

Statins (ATC C10AA) prescriptions data were collected from administrative databases in two Local Health Units (LHUs) in Northern Italy. Eligible patients should have had at least one statin prescription in three consecutive years (2004-2006).

The adopted indicators for drug utilization (figure1) included: "Calendar Days (CD)", calculated as the difference between the last and the first prescription dates in each year; "PDD days (PDDd)", calculated as the ratio between total mg prescribed and the surrogated prescribed daily doses¹; "DDD days (DDDd)", calculated as the ratio between total mg prescribed and the defined daily dose¹.

A Compliance to Therapy Index (CTI) was calculated as the ratio between the total PDDd and the CD: indexes were calculated for each patient and classified in four compliance categories ($\leq 25\%$, $>25\% \& \leq 50\%$, $50\% \& \leq 75\%$, $>75\% \& \leq 100\%$)².

Figure 1. Indicators' description



RESULTS

Indicators showed an increase in statins use over the study period in terms of both DDD and sPDD. Persistence to therapy for at least two years was around 50% in both LHUs.

PDDd was a more reliable measure of the daily dosage in comparison with DDDd, which resulted in a coverage period longer than the CD (Figure 2).

CTI analysis showed a decrease in low compliance categories (patients in the range 25%-50% decreased from 26% to 17%) and a raise in the rate of compliant patients (from 48% to 57%); single prescriptions increased from 1% to 5% (Figure 3).

CONCLUSIONS

Although statins' use is steadily growing, poor patients' persistence and adherence to therapy would need the implementation of strategies to improve compliance with lipid lowering medications.

REFERENCES

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- Penning-van Beest FJ. et al. Adherence to evidence-based statin guidelines reduces the risk of hospitalizations for acute myocardial infarction by 40%: a cohort study. *Eur Heart J*. 2007;28(2):154-9

Figure 2. Patients with at least 1 prescription in 2004-2006: coverage with statins therapy

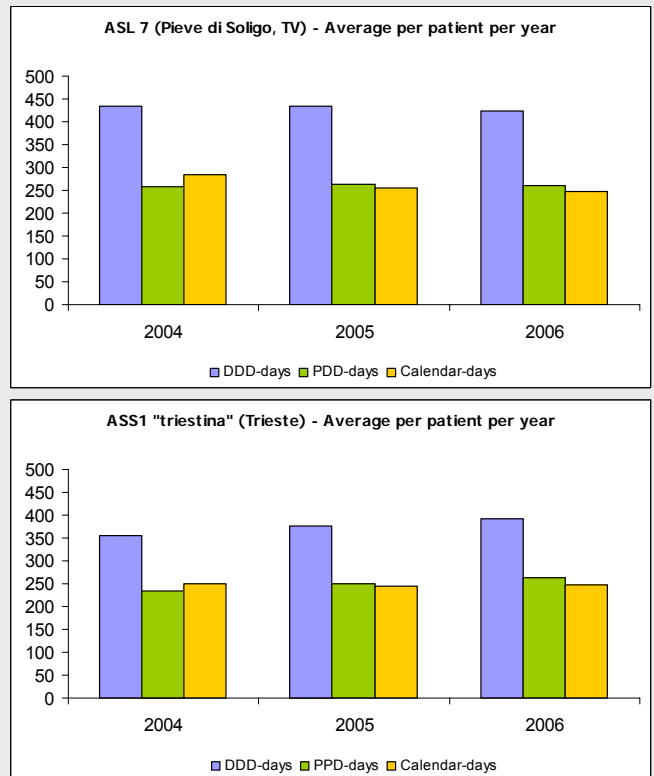


Figure 3. Patients with at least 1 prescription of statins: Compliance to Therapy Index

